

LISTING OF THE CLAIMS

1. (Currently amended) A method for providing program data, comprising:
broadcasting from a head-end less than the total number of available interactive program guide (IPG) pages, each IPG page being transmitted as an encoded video stream having a respective packet identifier (PID);
receiving, by the head-end from a terminal, a request message for a requested IPG page, the requested IPG page not being one of the transmitted IPG pages;
encoding, by the head-end, only a guide portion of the requested IPG page using a temporal slice persistence encoding scheme, the requested IPG page including the guide portion and a background portion;
assigning, by the head-end, a particular packet identifier (PID) to the encoded guide portion; and
demand-casting, by the head-end to the terminal, the encoded guide portion a limited number of times in a non-continual manner in response to receiving the request message.

2. (Previously presented) The method of claim 1, wherein the encoded guide portion of the requested IPG page is sent once in response to receiving the request message.

3. (Previously presented) The method of claim 1, further comprising:
waiting for an acknowledgement indicating that the guide portion of the requested IPG page has been received; and
upon receiving the acknowledgement, terminating the sending of the encoded guide portion of the requested IPG page.

4. (Previously presented) The method of claim 1, wherein the encoded guide portion of the requested IPG page is sent once initially in response to receiving the request message, the method further comprising:

waiting for an acknowledgement indicating that the guide portion of the requested IPG page has been received; and
if the acknowledgement is not received within a particular time period, resending the encoded guide portion of the requested IPG page a limited number of times.

5. (Previously presented) The method of claim 4, wherein the encoded guide portion of the requested IPG page is resent once in response to not receiving the acknowledgement within the particular time period.

6. (Previously presented) The method of claim 1, wherein the encoded guide portion of the requested IPG page is sent once initially in response to receiving the request message, the method further comprising:

receiving a second request message from the terminal for the requested IPG page; and
resending the encoded guide portion of the requested IPG page a limited number of times in response to receiving the second request message.

7. (Previously presented) The method of claim 1, wherein the particular PID used for the encoded guide portion of the requested IPG page is a PID assigned to the terminal for IPG delivery.

8. (Previously presented) The method of claim 1, further comprising:
signaling, by the head-end to the terminal, the identity of the particular PID used for the guide portion of the requested IPG page.

9. (Original) The method of claim 8, wherein the signaling is achieved via an in-band channel.

10. (Original) The method of claim 8, wherein the signaling is achieved via an out-of-band channel.

11. (Previously presented) The method of claim 1, wherein the particular PID used for the guide portion of the requested IPG page is computed based on a particular computation scheme.

12. (Previously presented) The method of claim 1, wherein the particular PID used for the guide portion of the requested IPG page is a PID assigned to the terminal for a duration of a communication session with the terminal.

13. (Currently amended) A method for receiving program data comprising:
receiving a broadcast at a terminal from a head-end, less than the total number of available interactive program guide (IPG) pages, each IPG page being transmitted as an encoded video stream having a respective packet identifier (PID);
sending, from the terminal to the head-end, a request message for a requested IPG page, the requested IPG page not being one of the transmitted IPG pages;

receiving, at the terminal from the head-end, a transmission of a guide portion of the requested IPG page, wherein the guide portion of the requested IPG page is transmitted a limited number of times in a non-continual manner in response to the request message; and

regenerating the requested IPG page from the received transmission, the requested IPG page including the guide portion and a background portion.

14. (Previously presented) The method of claim 13, further comprising:
sending an acknowledgement to the head-end upon receiving the transmission for the guide portion of the requested IPG page.

15. (Previously presented) The method of claim 13, further comprising:
prior to receiving the transmission for the guide portion of the requested IPG page, and if the guide portion of the requested IPG page is not received within a particular time period after sending the request message, resending the request message to the head-end for the requested IPG page.

16. (Previously presented) The method of claim 13, wherein the transmission is assigned a particular packet identifier (PID) at the head-end.

17. (Original) The method of claim 16, wherein the particular PID used for the transmission is a PID assigned to the terminal for IPG delivery.

18. (Previously presented) The method of claim 16, further comprising: receiving a message from the head-end indicating the particular PID assigned for the transmission of the guide portion of the requested IPG page.

19. (Currently amended) A system for providing program data, comprising:
a video encoder operative to encode a number of broadcast interactive program guide (IPG) pages and a guide portion of a requested IPG page using a temporal slice persistence encoding scheme, and to respectively generate a broadcast guide stream and a requested guide stream each having a respective packet identifier (PID), the broadcast IPG pages being less than a total number of available IPG pages, the guide portion of the requested IPG page not being one of the broadcast IPG pages, and the requested IPG page including the guide portion and a background portion;

a transport multiplexer coupled to the video encoder and operative to receive and multiplex the broadcast guide stream and the requested guide stream into a transport stream; and

a modulator coupled to the transport multiplexer and operative to receive the transport stream and generate an output signal suitable for transmission.

20. (Original) The system of claim 19, further comprising:
a session manager operative to receive a request message for the requested IPG page and direct the transport multiplexer to multiplex the requested guide stream into the transport stream.

21. (Original) The system of claim 20, wherein the session manager is further operative to receive an acknowledgement indicating that the requested IPG

page has been received and, in response, direct the transport multiplexer to stop multiplexing the requested guide stream into the transport stream.

22-24. (Cancelled)